



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/585,389	06/02/2000	Takeki Yazaki	NIT-200	5623

24956 7590 06/03/2005

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 DIAGONAL ROAD  
SUITE 370  
ALEXANDRIA, VA 22314

EXAMINER
----------

QURESHI, SHABANA

ART UNIT	PAPER NUMBER
----------	--------------

2155

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/585,389

Applicant(s)

YAZAKI ET AL.

Examiner

Shabana Qureshi

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Status of Claims*

1. Claims 1, 4-9, and 21 are pending in this office action. Claims 2, 3, and 10-21 have been canceled.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,812,525 issued to Teraslinna in view of US Patent 6,470,016 issued to Kalkunte et al.

With regards to claims 1 and 6, Teraslinna teaches a bandwidth monitoring method suitable for use in a network, comprising the steps of:

- transmitting a specific type of packet in preference to packets other than the specific type of packets (column 4, lines 44-54);
- judging whether an inputted packet corresponds to the specific type of packets according to a value in a header of the packet (column 2, lines 58-64; figure 4, item 44, header); and
- monitoring whether the packets violate a contract bandwidth under contract with a source of specific type of packets (column 2, lines 48-52); and

Although Teraslinna seeks to efficiently use bandwidth without violating traffic contract bandwidth, Teraslinna does not explicitly state that the unused contract bandwidth of a specific type of packet is used for packets not of that specific type. However, Kalkunte teaches that:

- when the packets of the specific type do not violate the contract bandwidth and does not belong to the specific type, transmitting the packet as if it belonged to the specific type (column 15, lines 13-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaches of Teraslinna with the teaching above of Kalkunte so that unused bandwidth may be used most efficiently with weighted bandwidth allocation (Kalkunte et al, column 3, lines 30-50).

It would further have been obvious to one of ordinary skill in the art at the time the invention was made that once the method of Kalkunte is combined with that of Teraslinna, header as taught in Teraslinna (figure 4, item 44 and relevant passage) would mandate the updating of the header when a non-priority packet is transmitted as a priority packet.

As per claim 2, Teraslinna in view of Kalkunte et al teach the bandwidth monitoring method according to claim 1, wherein the packet has a header, and the judging as to whether the packet corresponds to the specific type of packet is performed according to a value in the header (column 4, line 44-column 5, line 7).

As per claim 3, Teraslinna in view of Kalkunte et al teach the bandwidth monitoring method according to claim 2, further comprising the step of:

when the value in the header does not correspond to a specific value indicative of the specific type of packet, changing the value in the header to a specific value (column 5, lines 8-39).

As per claim 4, Teraslinna in view of Kalkunte et al teach the bandwidth monitoring method according 1, wherein the header has a priority field and the judging as to whether the packets correspond to the specific type of packets is performed according to a value in the priority field (column 4, lines 44-54).

As per claims 5 and 9, Teraslinna in view of Kalkunte et al teach the bandwidth monitoring method according to claim 1, wherein the monitoring is carried out by using a leaky bucket algorithm with a first depth of bucket when the packet does not correspond to the specific type of packet, and a leaky bucket algorithm with a second depth of bucket different from the first depth when the packet corresponds to the specific type of packet, thereby to judge whether or not the packet violates the contract bandwidth being under contract with the source of the packet (column 16, lines 1-47).

As per claim 7, Teraslinna in view of Kalkunte et al teach the bandwidth monitoring method according to claim 6. Kalkunte et al further teach the step of:

- transmitting the packet as a packet other than the specific type of packet when the bandwidth being used by the source of the packet exceeds the first bandwidth and the packet does not correspond to the specific type of packets (column 3, lines 30-59; column 4, lines 4-20).

As per claim 8, Teraslinna in view of Kalkunte et al teach the bandwidth monitoring method according to claim 6. Kalkunte et al further teach the step of:

- transmitting the packet as a packet other than the specific type of packet when the bandwidth being used by the source of the packet exceeds the contract bandwidth and the packet corresponds to the specific type of packets (column 3, lines 30-59; column 4, lines 4-20).

Art Unit: 2155

As per claim 21, Teraslinna in view of Kalkunte et al teach a bandwidth monitoring method suitable for use in a network, comprising the steps of:

- judging whether an inputted packet corresponds to the specific type of packets according to a value in a header of the packet (column 2, lines 58-64; figure 4, item 44, header); and
- monitoring whether the packets violate a contract bandwidth under contract with a source of specific type of packets (column 2, lines 48-52); and

Although Teraslinna seeks to efficiently use bandwidth without violating traffic contract bandwidth, Teraslinna does not explicitly state that the unused contract bandwidth of a specific type of packet is used for packets not of that specific type. However, Kalkunte teaches that:

- when the packets of the specific type do not violate the contract bandwidth and does not belong to the specific type, transmitting the packet as if it belonged to the specific type (column 15, lines 13-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaches of Teraslinna with the teaching above of Kalkunte so that unused bandwidth may be used most efficiently with weighted bandwidth allocation (Kalkunte et al, column 3, lines 30-50).

It would further have been obvious to one of ordinary skill in the art at the time the invention was made that once the method of Kalkunte is combined with that of Teraslinna, header as taught in Teraslinna (figure 4, item 44 and relevant passage) would mandate the updating of the header when a non-priority packet is transmitted as a priority packet.

***Response to Arguments***

4. Applicant's arguments filed 04 February 2005 have been fully considered but they are not persuasive.

5. Applicant's argument is not clear, as the Applicant does not specifically point out the limitation being argued. Examiner believes Applicant is arguing that the combination of Teraslinna and Kalkunte does not teach the use of unused bandwidth being used for packets other than priority packets. However, Kalkunte teaches a round robin method of using first priority packets and eventually non-priority packets for unused bandwidth as cited by the Examiner in the prior office action. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the header as taught in Teraslinna (figure 4, item 44 and relevant passage) would mandate the updating of the header when a non-priority packet is transmitted as a priority packet.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2155

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

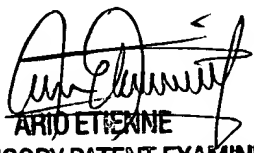
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shabana Qureshi whose telephone number is (571) 272-3990. The examiner can normally be reached on Monday - Thursday, 9:30 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shabana Qureshi  
Examiner  
Art Unit 2155

30 May 2005  
SQ

  
ARIO ETIENNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100